CPC COOPERATIVE PATENT CLASSIFICATION

H04S STEREOPHONIC SYSTEMS (information storage on discs or tapes <u>G11B</u>; broadcast systems for the distribution of stereophonic information <u>H04H 20/88</u>; multiplex systems in general <u>H04J</u>)

In this subclass, the following term is used with the meaning indicated:

"stereophonic systems" covers quadraphonic or similar systems

| 1/00 | Two-channel systems (H04S 5/00, H04S 7/00 take | 7/303 | • • • {Tracking of listener position or orientation} |
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| | precedence) | 7/304 | • • • {For headphones} |
| 1/002 | • {Non-adaptive circuits, e.g. manually adjustable or static, for enhancing the sound image or the spatial distribution (control circuits for electronic adaptation of the sound field <u>H04S 7/30</u>)} | 7/305 | • • {Electronic adaptation of stereophonic audio signals to reverberation of the listening space (H04S 7/301 takes precedence; arrangements for producing a reverberation or echo sound |
| 1/005 | • • {For headphones} | | <u>G10K 15/08</u> ; for public address systems |
| 1/007 | • {in which the audio signals are in digital form (data reduction aspects thereof based on psychoacoustics | 7/306 | H04R 27/00, H04R 29/00)} {For headphones} |
| | <u>G10L 19/02</u>)} | 7/307 | • • {Frequency adjustment, e.g. tone control |
| 3/00 | Systems employing more than two channels, e.g. quadraphonic (<u>H04S 5/00</u> , <u>H04S 7/00</u> take precedence) | | (<u>H04S 7/301</u> takes precedence; circuits for correcting the frequency response of transducers <u>H04R 3/04</u> ; tone control circuits in amplifiers <u>per se H03G 5/00</u>)} |
| 3/002 | • {Non-adaptive circuits, e.g. manually adjustable or static, for enhancing the sound image or the | 7/308 | {Electronic adaptation dependent on speaker or headphone connection} |
| 3/004 | spatial distribution (control circuits for electronic adaptation of the sound field <u>H04S 7/30</u>)} • {For headphones} | 7/40 | • {Visual indication of stereophonic sound image (visual indication of individual signal levels |
| 3/004 | {For headphones} {in which a plurality of audio signals are | | <u>H04R 29/008</u>)} |
| 3/000 | transformed in a combination of audio signals | 2400/00 | Details of stereophonic systems covered by <u>H04S</u> |
| | and modulated signals, e.g. CD-4 systems (for broadcasting <u>H04H 20/88</u> , <u>H04B 1/1646</u>)} | 2400/00 | but not provided for in its groups (not used, see subgroups) |
| 3/008 | • {in which the audio signals are in digital form, i.e. employing more than two discrete digital channels, e.g. Dolby Digital, Digital Theatre | 2400/01 | • Multi-channel, i.e. more than two input channels, sound reproduction with two speakers wherein the multi-channel information is substantially preserved |
| | Systems [DTS] (data reduction aspects thereof based on psychoacoustics <u>G10L 19/02</u>)} | 2400/03 | Aspects of down-mixing multi-channel audio to configurations with lower numbers of playback |
| 3/02 | of the matrix type, i.e. in which input signals are combined algebraically, e.g. after having been phase | | channels, e.g. 7.1 -> 5.1 (<u>H04S 2400/01</u> takes precedence) |
| | shifted with respect to each other | 2400/05 | Generation or adaptation of centre channel in multi- |
| 5/00 | Pseudo-stereo systems, e.g. in which additional | 2 400 /07 | channel audio systems |
| | channel signals are derived from monophonic signals by means of phase shifting, time delay | 2400/07 | Generation or adaptation of the Low Frequency Effect [LFE] channel, e.g. distribution or signal |
| | or reverberation (arrangements for producing a | 2 400 /00 | processing |
| 5/005 | reverberation or echo sound <u>G10K 15/08</u>) • {of the pseudo five- or more-channel type, e.g. | 2400/09 | Electronic reduction of distortion of stereophonic sound systems |
| 5/02 | virtual surround} . of the pseudo four-channel type, e.g. in which rear | 2400/11 | • Positioning of individual sound objects, e.g. moving airplane, within a sound field (H04S 2420/13 takes |
| | channel signals are derived from two-channel stereo | | precedence) |
| 7/00 | signals | 2400/13 | Aspects of volume control, not necessarily automatic, in stereophonic sound systems |
| 7/00 | Indicating arrangements; Control arrangements, e.g. balance control | 2400/15 | Aspects of sound capture and related signal processing for recording or reproduction |
| 7/30 | • {Control circuits for electronic adaptation of the | 2420/00 | Techniques used stereophonic systems covered by |
| | sound field (non-adaptive circuits, i.e. manually adjustable or static, for enhancing the sound image or the spatial distribution <u>H04S 1/002</u> , | 2420/00 | H04S but not provided for in its groups (not used, see subgroups) |
| | <u>H04S 3/002</u>)} | 2420/01 | • Enhancing the perception of the sound image or of |
| 7/301 | • • {Automatic calibration of stereophonic sound system, e.g. with test microphone} | | the spatial distribution using head related transfer functions [HRTF's] or equivalents thereof, e.g. |
| 7/302 | • • {Electronic adaptation of stereophonic sound system to listener position or orientation (H04S 7/301 takes precedence)} | | interaural time difference [ITD] or interaural level difference [ILD] |

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(H04S 7/301 takes precedence)}

H04S

| 2420/03 | Application of parametric coding in stereophonic |
|---------|--|
| | audio systems |
| 2420/05 | • Application of the precedence or Haas effect, i.e. the |
| | effect of first wavefront, in order to improve sound- |
| | source localisation |
| 2420/07 | Synergistic effects of band splitting and sub-band |
| | processing |
| 2420/11 | Application of ambisonics in stereophonic audio |
| | systems |
| 2420/13 | Application of wave-field synthesis in stereophonic |
| | audio systems |
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